GenCore version 5.1.3

OM protein - protein search, using sw model

Run on: December 13, 2002, 21:04:38 ; Search time 70 Seconds
(without alignments)
102.793 Million cell updates/sec

Title: US-09-659-737A-2
Perfect score: 293
Sequence: 1 HRDIKAGNILLLEKIEHDDI.....EWHRTTKMSTAGTYAWMAPE 54

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_101002:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	293	100.0	54	22	AAB20333	Human MLK4 partial
2	282	96.2	719	22	AAB85513	Human protein kina
3	282	96.2	1021	23	ABP61000	Novel human protei
4	282	96.2	1036	23	ABB80923	Novel human protei
5	239	81.6	1046	22	AAE11775	Human kinase (PKIN
6	239	81.6	1097	23	AAE21717	Human PKIN-12 prot
7	231	78.8	847	23	AAE22763	Human mitogen acti
8	218	74.4	138	22	AAO05527	Human polypeptide
9	184	62.8	1020	22	ABB58999	Drosophila melanog
10	173	59.0	45	16	AAR85933	Protein tyrosine-k
11	139.5	47.6	977	22	ABB71694	Drosophila melanog
12	124.5	42.5	859	16	AAR82886	Human leucine zipp
13	124.5	42.5	859	18	AAW31227	Human leucine-zipp
14	124.5	42.5	888	23	ABB57049	Mouse ischaemic co
15	122	41.6	276	21	AAG28423	Arabidopsis thalia
16	122	41.6	276	21	AAG50302	Arabidopsis thalia
17	122	41.6	338	21	AAG28422	Arabidopsis thalia
18	122	41.6	338	21	AAG50301	Arabidopsis thalia
19	122	41.6	346	21	AAG28421	Arabidopsis thalia
20	122	41.6	346	21	AAG50300	Arabidopsis thalia
21	121.5	41.5	1490	22	ABG19123	Novel human diagno
22	117	39.9	970	22	AAB50443	Barley EDR1. Hord
23	115.5	39.4	183	21	AAB25337	Pinus radiata cell
24	114	38.9	141	21	AAG03583	Human secreted pro
25	114	38.9	349	22	AAG75571	Human colon cancer
26	114	38.9	455	21	AAB18657	A human regulator
27	114	38.9	455	21	AAY83278	Human survival reg
28	114	38.9	455	21	AAY84321	A human cardiovasc
29	114	38.9	473	22	AAM25322	Human protein sequ
30	114	38.9	800	22	AAB71957	Human TGF-beta rec
31	114	38.9	800	22	AAB65673	Novel protein kina
32	110.5	37.7	1151	23	ABB92177	Herbicidally activ
33	107.5	36.7	367	21	AAG32053	Arabidopsis thalia
34	107.5	36.7	369	21	AAG32052	Arabidopsis thalia
35	107.5	36.7	407	21	AAG32051	Arabidopsis thalia
36	107	36.5	903	22	AAB50440	Rice EDR1. Oryza
37	106	36.2	731	22	AAB74209	Protein encoded by
38	106	36.2	731	23	ABB93202	Herbicidally activ
39	106	36.2	933	22	AAB50437	Arabidopsis thalia
40	105.5	36.0	649	23	ABB91538	Herbicidally activ
41	105.5	36.0	988	23	ABB92320	Herbicidally activ
42	105	35.8	844	23	ABB93030	Herbicidally activ
43	104.5	35.7	369	21	AAG22172	Arabidopsis thalia
44	104.5	35.7	374	21	AAG22171	Arabidopsis thalia
45	104.5	35.7	381	23	ABB91540	Herbicidally activ

ALIGNMENTS

RESULT 1
AAB20333
ID AAB20333 standard; Protein; 54 AA.
XX
AC AAB20333;
XX
DT 29-MAY-2001 (first entry)
XX
DE Human MLK4 partial polypeptide.
XX
KW MLK4; human; c-Jun N-terminal kinase kinase kinase; JNKKK;
KW protein kinase; ultraviolet radiation; skin damage; inflammation;
KW psoriasis; radioprotective; antiinflammatory; antipsoriatic;
KW vulnerary.
XX
OS Homo sapiens.
XX
PN EP1085093-A2.
XX
PD 21-MAR-2001.
XX
PF 12-SEP-2000; 2000EP-0307866.
XX
PR 20-SEP-1999; 99US-0155029.
XX
PA (UYNY) UNIV NEW YORK STATE.
XX
PI Blumenberg M, Gazel AM;
XX
DR WPI; 2001-236883/25.
DR N-PSDB; AAF30487.
XX
PT New polynucleotides encoding c-Jun N-terminal kinase kinase kinases

PT i.e. MLK4, PAK4, associated with skin damage for use in drug screening
PT and development -
XX
PS Claim 1; Page 23; 51pp; English.
XX
CC The present sequence is that of a MLK4 polypeptide, as predicted
CC from an isolated MLK4 partial cDNA (see AAF30487). MLK4 is 1 of 4
CC novel c-Jun N-terminal kinase kinase kinases (JNKKK) of the
CC invention. It has 50-78% identity to members of the MLK family of
CC JNKKKs. MLK4 is expressed in keratinocytes, kidney and pancreas,
CC but not in brain, placenta, lung, liver or skeletal muscle. The
CC transcript size is 4.8 kb. MLK4, PAK4, PAK5 and YSK2 polynucleotides
CC and their gene products are useful for elucidation of the components
CC involved in the cellular response to ultraviolet radiation. They can
CC be used in drug discovery, by screening for compounds that affect the
CC activity of a JNKKK or which affect the expression of a gene encoding
CC a JNKKK. Particularly useful are drugs that reduce UV light-induced
CC damage of the skin, inflammation and psoriasis, and drugs that
CC enhance wound healing.
XX
SQ Sequence 54 AA;

Query Match 100.0%; Score 293; DB 22; Length 54;
Best Local Similarity 100.0%; Pred. No. 4.6e-36;
Matches 54; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HRDIKAGNILLLEKIEHDDICNKTLKITDFGLAREWHRTTKMSTAGTYAWMAPE 54
||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 1 HRDIKAGNILLLEKIEHDDICNKTLKITDFGLAREWHRTTKMSTAGTYAWMAPE 54

RESULT 2
AAB85513
ID AAB85513 standard; protein; 719 AA.
XX
AC AAB85513;
XX
DT 25-SEP-2001 (first entry)
XX
DE Human protein kinase SGK067.
XX
KW Protein kinase; enzyme; cytostatic; nootropic; neuroprotective; human;
KW antiparkinsonian; virucide; antibacterial; antifungal; antimigraine;
KW analgesic; hypotensive; hypertensive; immunosuppressive; antiallergic;
KW antipsoriatic; antirheumatic; antiarthritic; ophthalmological; anorectic;
KW osteopathic; thrombolytic; antiarteriosclerotic; antiasthmatic;
KW vasotropic; antidiabetic; gene therapy.
XX
OS Homo sapiens.
XX
PN WO200155356-A2.
XX
PD 02-AUG-2001.
XX
PF 25-JAN-2001; 2001WO-US02337.
XX
PR 25-JAN-2000; 2000US-0178078.
PR 31-JAN-2000; 2000US-0179364.
PR 17-FEB-2000; 2000US-0183173.
PR 17-MAR-2000; 2000US-0190162.
PR 29-MAR-2000; 2000US-0193404.
PR 13-NOV-2000; 2000US-0247013.
XX
PA (SUGE-) SUGEN INC.
XX
PI Plowman G, Whyte D, Manning G, Sudarsanam S, Martinez R;
XX
DR WPI; 2001-476202/51.
DR N-PSDB; AAH46913.
XX
PT Kinase polypeptides useful for treating cancers, Alzheimer's disease,
PT viral infections, diabetes, obesity, organ transplant rejection and
PT rheumatoid arthritis -
XX
PS Claim 7; Page 217; 218pp; English.
XX
CC The invention provides human protein kinases and protein kinase-like
CC enzymes and polynucleotides encoding the polypeptides. The kinase
CC polypeptides and their modulators are useful for treating a disease or
CC disorder such as cancer, immune-related diseases, cardiovascular disease,
CC brain or neuronal-associated disease and metabolic disorders, including
CC cancers of tissues, cancers of hematopoietic origin, diseases of the
CC central nervous system, diseases of the peripheral nervous system,
CC Alzheimer's disease, Parkinson's disease, multiple sclerosis, amyotrophic
CC lateral sclerosis, viral infections, infections caused by prions,
CC bacteria and fungi, ocular diseases, migraines, pain, sexual dysfunction,
CC mood disorders, attention disorders, cognition disorders, hypotension,
CC hypertension, psychotic disorders, neurological disorders, dyskinesias,
CC metabolic disorders, and organ transplant rejection. They are also useful
CC for treating rhinitis, autoimmunity, atherosclerosis, psoriasis,
CC osteoarthritis, asthma, chronic inflammatory pelvic disease, chronic
CC inflammatory bowel disease, rheumatoid arthritis, metabolic disorders
CC such as diabetes, obesity, cardiovascular diseases such as reperfusion
CC injury, coronary thrombosis, clotting disorders and atherosclerosis,
CC ocular diseases such as glaucoma, retinopathy and macular degeneration,
CC psychiatric and neurological disorders such as anxiety, schizophrenia,
CC dementia, manic depression, etc. The polynucleotides are useful in gene
CC therapy techniques to treat the above mentioned disorders. Sequences
CC AAB85491-85522 represent the human protein kinases of the invention.
XX
SQ Sequence 719 AA;

Query Match 96.2%; Score 282; DB 22; Length 719;
Best Local Similarity 94.4%; Pred. No. 6e-33;
Matches 51; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HRDIKAGNILLLEKIEHDDICNKTLKITDFGLAREWHRTTKMSTAGTYAWMAPE 54
|||:|: ||||||||||||||||||||||||||||||||||||||||||||||
Db 261 HRDLKSSNILLLEKIEHDDICNKTLKITDFGLAREWHRTTKMSTAGTYAWMAPE 314

RESULT 3
ABP61000
ID ABP61000 standard; Protein; 1021 AA.
XX
AC ABP61000;
XX
DT 10-SEP-2002 (first entry)
XX
DE Novel human protein. SEQ ID 87.
XX
KW Human; cytostatic; vulnerary; antiarteriosclerotic; antiparkinsonian;
KW nootropic; neuroprotective; immunosuppressive; haemostatic;
KW antiinflammatory; cardiant; antiulcer; virucide; antithyroid;
KW cerebroprotective; anorectic; metabolic; vaccine; cancer; infection;
KW wound healing disorders; atherosclerosis; Parkinson's disease;
KW Alzheimer's disease; autoimmune disorder; haematopoietic disorder;
KW inflammation; neoplastic disease; nervous system disorder;
KW cardiovascular disorders; pancreatitis; respiratory disorder;
KW hyperproliferation; systemic autoimmune disease; hyper-immunity;
KW developmental abnormality; gastrointestinal ulceration; neuropathy;
KW haematological disease; metabolic disease; sperm dysfunction;
KW thyroid disorder; hypothyroidism; brain damage; colitis;
KW cone photo- transduction deficiency; neurological disease; stroke;
KW angiogenesis; ovulation disorder; spinal cord; thyroid gland; heart;
KW trachea; thymus; lymph node; muscular system; obesity; anorexia;
KW growth abnormality; precocious puberty.
XX
OS Homo sapiens.
XX
PN WO200250105-A1.
XX
PD 27-JUN-2002.
XX
PF 17-DEC-2001; 2001WO-US49232.
XX

PR 19-DEC-2000; 2000US-256710P.
PR 20-DEC-2000; 2000US-257048P.
PR 09-JAN-2001; 2001US-260482P.
PR 30-JAN-2001; 2001US-264922P.
PR 06-FEB-2001; 2001US-266797P.
PR 19-MAR-2001; 2001US-276988P.
PR 04-APR-2001; 2001US-281535P.
PR 08-MAY-2001; 2001US-289622P.
XX
PA (SMIK) SMITHKLINE BEECHAM CORP.
PA (SMIK) SMITHKLINE BEECHAM PLC.
PA (GLAX) GLAXO GROUP LTD.
XX
PI Agarwal P, Birkeland M, Cogswell JP, Kabnick KF, Lai Y;
PI Martensen SA, Rizvi SK, Smith RF, Strum JC, Xie Q;
XX
DR WPI; 2002-508784/54.
DR N-PSDB; ABQ86165.
XX
PT Secreted proteins and polynucleotides useful as vaccines for preventing
PT or treating various diseases e.g. cancer, wounds, atherosclerosis,
PT Parkinson's disease, Alzheimer's disease, infection, autoimmune
PT disorder -
XX
PS Claim 1(a); Page 307-309; 335pp; English.
XX
CC The invention relates to an isolated polypeptide with signal sequences
CC which allow it to be secreted extracellularly or membrane associated.
CC The activity of polypeptides of the invention may be described as,
CC cytostatic, vulnerary, antiarteriosclerotic, antiparkinsonian, nootropic,
CC neuroprotective, immunosuppressive, haemostatic, antiinflammatory,
CC cardiant, antiulcer, virucide, antithyroid, cerebroprotective, anorectic,
CC and metabolic. Polypeptides and polynucleotides of the invention are
CC useful in the treatment, or as a vaccine in the prevention of, cancer,
CC wound healing disorders, infection, atherosclerosis, Parkinson's disease
CC and Alzheimer's disease, autoimmune disorder, haematopoietic disorder,
CC inflammation, neoplastic diseases, nervous system related disorders and
CC cardiovascular disorders, pancreatitis, respiratory disorder,
CC hyperproliferation, systemic autoimmune disease, hyper-immunity,
CC developmental abnormality, gastrointestinal ulceration, neuropathy,
CC haematological diseases, metabolic diseases, sperm dysfunction, thyroid
CC disorders e.g. hypothyroidism, brain damages, colitis, cone photo-
CC transduction deficiency, neurological diseases, stroke, angiogenesis,
CC ovulation disorders, diseases in the spinal cord, thyroid gland, heart,
CC trachea, thymus, lymph node and muscular system, obesity, anorexia,
CC growth abnormalities, and alleviation of precocious puberty. The
CC sequences given in records ABP60965-ABP61019 represent novel human
CC proteins of the invention.
XX
SQ Sequence 1021 AA;

Query Match 96.2%; Score 282; DB 23; Length 1021;
Best Local Similarity 94.4%; Pred. No. 9.4e-33;
Matches 51; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HRDIKAGNILLLEKIEHDDICNKTLKITDFGLAREWHRTTKMSTAGTYAWMAPE 54
||:|: ||||||||||||||||||||||||||||||||||||||||||||||||||
Db 246 HRDLKSSNILLLEKIEHDDICNKTLKITDFGLAREWHRTTKMSTAGTYAWMAPE 299

RESULT 4
ABB80923
ID ABB80923 standard; Protein; 1036 AA.
XX
AC ABB80923;
XX
DT 08-OCT-2002 (first entry)
XX
DE Novel human protein (NHP) kinase.
XX
KW Novel human protein; NHP; kinase; human; enzyme.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Misc-difference 925
FT /note= "encoded by WGT"
XX
PN WO200255685-A2.
XX
PD 18-JUL-2002.
XX
PF 10-DEC-2001; 2001WO-US47606.
XX
PR 11-DEC-2000; 2000US-254744P.
XX
PA (LEXI-) LEXICON GENETICS INC.
XX
PI Hu Y, Kieke JA, Donoho G;
XX
DR WPI; 2002-566739/60.
DR N-PSDB; ABN86357, ABN86358.
XX
PT Novel human kinase polynucleotide encoding a protein that shares
PT structural similarity with animal kinases for therapeutic, diagnostic
PT and pharmacogenomic applications -
XX
PS Claim 1; Page 37-39; 41pp; English.
XX
CC The invention relates to a novel human protein (NHP), kinase that shares
CC structural similarity with animal kinases. The kinase polynucleotides are
CC useful in therapeutic, diagnostic and pharmacogenomic applications and
CC for identifying compounds that modulate, i.e. act as agonists or
CC antagonists of the gene expression or gene product activity. The present
CC sequence represents the NHP kinase.
XX
SQ Sequence 1036 AA;

Query Match 96.2%; Score 282; DB 23; Length 1036;
Best Local Similarity 94.4%; Pred. No. 9.6e-33;
Matches 51; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HRDIKAGNILLLEKIEHDDICNKTLKITDFGLAREWHRTTKMSTAGTYAWMAPE 54
||:|: ||||||||||||||||||||||||||||||||||||||||||||||||||
Db 261 HRDLKSSNILLLEKIEHDDICNKTLKITDFGLAREWHRTTKMSTAGTYAWMAPE 314

RESULT 5
AAE11775
ID AAE11775 standard; Protein; 1046 AA.
XX
AC AAE11775;
XX
DT 18-DEC-2001 (first entry)
XX
DE Human kinase (PKIN)-9 protein.
XX
KW Human kinase; PKIN; gene therapy; adenocarcinoma; immune disorder; gout;
KW cancer; allergy; sarcoma; leukaemia; acquired immune deficiency syndrome;
KW AIDS; Addison's disease; microbial infection; inflammation; osteoporosis;
KW atherosclerosis; cardiovascular disease; myocardial infarction; anaemia;
KW myasthenia gravis; cirrhosis; cataract; growth and development disorder;
KW seizure disorder; pulmonary embolism; Gaucher's disease; lipid disorder;
KW lipid storage disease; Pick's disease; Tay-Sachs disease; renal disease;
KW obesity; restorative therapy; immunomodulatory; vaccine; cardiovascular;
KW antimicrobial; cytostatic; antiinflammatory; asthma.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Domain 55..114
FT /note= "SH3 domain"
FT Domain 134..393
FT /note= "Eukaryotic protein kinase domain"
FT Domain 136..386
FT /note= "Protein kinase domain"

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FT   Region          154..207
FT                   /note= "Receptor tyrosine kinase"
FT   Region          181..228
FT                   /note= "Receptor tyrosine kinase"
FT   Region          210..223
FT                   /note= "Tyrosine kinase catalytic site"
FT   Region          232..254
FT                   /note= "Receptor tyrosine kinase"
FT   Region          248..266
FT                   /note= "Tyrosine kinase catalytic site"
FT   Region          290..337
FT                   /note= "Receptor tyrosine kinase"
FT   Region          291..340
FT                   /note= "Receptor tyrosine kinase"
FT   Region          298..330
FT                   /note= "Receptor tyrosine kinase"
FT   Region          301..311
FT                   /note= "Tyrosine kinase catalytic site"
FT   Region          320..342
FT                   /note= "Tyrosine kinase catalytic site"
FT   Region          337..389
FT                   /note= "Receptor tyrosine kinase"
FT   Region          345..389
FT                   /note= "Receptor tyrosine kinase"
FT   Region          356..404
FT                   /note= "Receptor tyrosine kinase"
FT   Region          364..386
FT                   /note= "Tyrosine kinase catalytic site"
XX
PN   WO200181555-A2.
XX
PD   01-NOV-2001.
XX
PF   20-APR-2001; 2001WO-US12992.
XX
PR   20-APR-2000; 2000US-199021P.
PR   28-APR-2000; 2000US-200226P.
PR   05-MAY-2000; 2000US-202339P.
PR   11-MAY-2000; 2000US-203505P.
PR   18-MAY-2000; 2000US-205564P.
PR   26-MAY-2000; 2000US-207739P.
PR   01-JUN-2000; 2000US-208795P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Yue H, Gandhi AR, Tribouley CM, Kearney L, Griffin JA, Nguyen DB;
PI   Bandman O, Lu DAM, Lal P, Burford N, Khan FA, Walia NK, Yao MG;
PI   Patterson C, Burrill JD, Marcus GA, Zingler KA, Recipon SA, Lu Y;
PI   Policky JL, Thornton M, Tang YT, Hafalia A, Elliott VS, Baughn MR;
PI   Walsh RT, Ramkumar J, Borowsky ML, Au-young J, Hillman JL;
PI   Gururajan R;
XX
DR   WPI; 2001-611740/70.
DR   N-PSDB; AAD18824.
XX
PT   Human kinases and nucleic acids, useful for preventing diagnosing and
PT   treating cancers, inflammation and immune disorders -
XX
PS   Claim 1; Page 134-136; 166pp; English.
XX
CC   The present invention relates to human kinases (PKIN) and the nucleic
CC   acids encoding them. PKIN is used as vaccine and in gene therapy. PKIN is
CC   used in the prevention, diagnosis and treatment of diseases cancers,
CC   adenocarcinoma, leukaemia, sarcoma, immune disorder, Addison's disease,
CC   acquired immune deficiency syndrome (AIDS), anaemia, asthma, allergies,
CC   gout, microbial infections, cardiovascular disease and/or inflammation,
CC   myasthenia gravis, atherosclerosis, cirrhosis, osteoporosis, myocardial
CC   infarction, cataract, growth and development disorder, seizure disorder,
CC   pulmonary embolism, Gaucher's disease, lipid disorder, lipid storage
CC   disease, Pick's disease, Tay-Sachs disease, renal disease and obesity.
CC   PKIN may be used to treat disorders associated with decreased PKIN
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of PKIN by expressing inactive proteins or to
CC   supplement the patients own production of PKIN. PKIN nucleic acids may be
CC   used to produce the PKIN polypeptide, by inserting the nucleic acids into
CC   a host cell and culturing the cell to express the protein. PKIN nucleic
CC   acid and its complementary sequences may also be used as DNA probes in
CC   diagnostic assays to detect and quantitate the presence of similar
CC   nucleic acid sequences in samples and therefore which patients may be
CC   in need of restorative therapy. The present sequence is human PKIN-9
CC   protein.
XX
SQ   Sequence   1046 AA;

  Query Match             81.6%;  Score 239;  DB 22;  Length 1046;
  Best Local Similarity   77.8%;  Pred. No. 2.5e-26;
  Matches   42;  Conservative    7;  Mismatches    5;  Indels    0;  Gaps    0;

Qy       1 HRDIKAGNILLLEKIEHDDICNKTLKITDFGLAREWHRTTKMSTAGTYAWMAPE 54
             |||:|: |||:|:|:|: |: || ||||||||||||||||||| ||||||||||
Db     256 HRDLKSSNILILQKVENGDLSNKILKITDFGLAREWHRTTKMSAAGTYAWMAPE 309


RESULT 6
AAE21717
ID   AAE21717 standard; Protein; 1097 AA.
XX
AC   AAE21717;
XX
DT   16-JUL-2002  (first entry)
XX
DE   Human PKIN-12 protein.
XX
KW   Human; kinase; enzyme; PKIN-12 protein; immune system disorder; anaemia;
KW   acquired immune deficiency syndrome; thymic hypoplasia; Crohn's disease;
KW   asthma; neurological disorder; epilepsy; Charcot-Marie-Tooth disease;
KW   AIDS; seizures; cell proliferative disorder; cancer; adenocarcinoma;
KW   leukaemia; lymphoma; melanoma; myeloma; sarcoma; developmental disorder;
KW   Down's syndrome; gene therapy; protein therapy; cytostatic.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1..17
FT                   /label= Signal_peptide
FT   Protein         18..1097
FT                   /note= "Mature human PKIN-12 protein"
FT   Domain          55..114
FT                   /note= "SH3 domain"
FT   Domain          144..403
FT                   /note= "Eukaryotic protein kinase domain"
FT   Domain          146..396
FT                   /note= "Protein kinase domain"
FT   Domain          163..396
FT                   /note= "Protein kinase domain"
FT   Domain          220..233
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FT                   /note= "Tyrosine kinase catalytic domain"
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FT   Domain          374..396
FT                   /note= "Tyrosine kinase catalytic domain"
FT   Domain          438..749
FT                   /note= "Leucine zipper domain"
FT   Domain          869..893
FT                   /note= "Leucine zipper domain"
XX
PN   WO200218557-A2.
XX
PD   07-MAR-2002.
XX
PF   31-AUG-2001; 2001WO-US27219.
XX
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PR 31-AUG-2000; 2000US-229873P.
PR 08-SEP-2000; 2000US-231357P.
PR 14-SEP-2000; 2000US-232654P.
PR 22-SEP-2000; 2000US-234902P.
PR 29-SEP-2000; 2000US-236499P.
PR 06-OCT-2000; 2000US-238389P.
PR 13-OCT-2000; 2000US-240542P.
XX
PA (INCY-) INCYTE GENOMICS INC.
XX
PI Bandman O, Nguyen DB, Walia NK, Hafalia AJA, Yao MG, Gandhi AR;
PI Gururajan R, Ding L, Patterson C, Yue H, Baughn MR, Tribouley CM;
PI Thornton M, Elliott VS, Lu Y, Ison CH, Au-Young J, Tang YT;
PI Azimzai Y, Burrill JD, Marcus GA, Zingler KA, Lu DAM, Lal PG;
PI Ramkumar J, Warren BA, Kearney L, Policky JL, Thangavelu K;
PI Burford N;
XX
DR WPI; 2002-329769/36.
DR N-PSDB; AAD34309.
XX
PT New human kinases, useful for diagnosing, treating or preventing immune
PT system disorders (e.g. Crohn's disease), neurological disorders (e.g.
PT epilepsy), or cell proliferative disorders (e.g. cancers such as
PT leukemia or lymphoma) -
XX
PS Claim 67; Page 171-173; 218pp; English.
XX
CC The present invention relates to human kinases (PKIN) and polynucleotides
CC encoding such proteins. PKIN sequences of the invention are useful for
CC diagnosing, treating or preventing disorders associated with aberrant
CC expression of PKIN, particularly immune system disorders (e.g. acquired
CC immune deficiency syndrome (AIDS), thymic hypoplasia, Crohn's disease,
CC anaemia, asthma), neurological disorders (e.g. epilepsy, Charcot-Marie-
CC Tooth disease or seizures), cell proliferative disorders (e.g. cancers
CC such as adenocarcinoma, leukaemia, lymphoma, melanoma, myeloma, sarcoma),
CC and developmental disorders (e.g. Down's syndrome). They are also used
CC in gene therapy and protein therapy. The present sequence is human
CC PKIN-12 protein.
XX
SQ Sequence 1097 AA;

Query Match 81.6%; Score 239; DB 23; Length 1097;
Best Local Similarity 77.8%; Pred. No. 2.7e-26;
Matches 42; Conservative 7; Mismatches 5; Indels 0; Gaps 0;

Qy 1 HRDIKAGNILLLEKIEHDDICNKTLKITDFGLAREWHRTTKMSTAGTYAWMAPE 54
|||:|: |||:|:|:|: |: || ||||||||||||||||||| ||||||||||
Db 266 HRDLKSSNILILQKVENGDLSNKILKITDFGLAREWHRTTKMSAAGTYAWMAPE 319

RESULT 7
AAE22763
ID AAE22763 standard; Protein; 847 AA.
XX
AC AAE22763;
XX
DT 09-AUG-2002 (first entry)
XX
DE Human mitogen activated protein kinase, MAP3K11.
XX
KW Human; cytostatic; antisense gene therapy; screening; protein kinase;
KW cancer; liver; colon; tumour; inflammation; arthritic synovium; MAP3K11;
KW enzyme; mitogen activated protein kinase.
XX
OS Homo sapiens.
XX
PN WO200224947-A2.
XX
PD 28-MAR-2002.
XX
PF 20-SEP-2001; 2001WO-IB02237.
XX
PR 20-SEP-2000; 2000US-233999P.
PR 02-OCT-2000; 2000US-237419P.
PR 02-OCT-2000; 2000US-237423P.
PR 04-OCT-2000; 2000US-238558P.
PR 10-MAY-2001; 2001US-290555P.
XX
PA (KINE-) KINETEK PHARM INC.
PA (UYBR-) UNIV BRITISH COLUMBIA.
XX
PI Yoganathan T, Delaney AD;
XX
DR WPI; 2002-394145/42.
DR N-PSDB; AAD36139.
XX
PT Diagnosing cancer, comprises determining the upregulation of expression
PT of a nucleic acid sequence encoding a protein kinase or upregulation of
PT expression of the protein kinase, in the cancer -
XX
PS Claim 1; Page 60-62; 87pp; English.
XX
CC The invention relates to a method for screening biologically active agent
CC that modulates cancer associated protein kinase function. The invention
CC also relates to a method for diagnosing cancer comprising determining the
CC upregulation of expression of a nucleic acid sequence encoding a protein
CC kinase. The method is useful for diagnosing cancer. A protein kinase is
CC useful for screening biological agents that modulate cancer associated
CC protein kinase function. Downregulating the activity of protein kinase is
CC useful for inhibiting the growth of a cancer cell, e.g. liver or colon
CC cancer. A nucleic acid encoding protein kinase is useful to screen biopsy
CC derived tumours and inflammatory samples such as arthritic synovium, for
CC amplified DNA in the cell or increased expression of corresponding mRNA
CC or protein and is also useful to detect differences in expression levels
CC such as molecular weight, amino acid and nucleotide sequences between the
CC two cells. The present sequence is human mitogen activated protein
CC kinase, MAP3K11.
XX
SQ Sequence 847 AA;

Query Match 78.8%; Score 231; DB 23; Length 847;
Best Local Similarity 77.8%; Pred. No. 3e-25;
Matches 42; Conservative 7; Mismatches 5; Indels 0; Gaps 0;

Qy 1 HRDIKAGNILLLEKIEHDDICNKTLKITDFGLAREWHRTTKMSTAGTYAWMAPE 54
|||:|: ||||||: || ||: :||||||||||||||:||:|| ||||||||||
Db 239 HRDLKSNNILLLQPIESDDMEHKTLKITDFGLAREWHKTTQMSAAGTYAWMAPE 292

RESULT 8
AAO05527
ID AAO05527 standard; Protein; 138 AA.
XX
AC AAO05527;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human polypeptide SEQ ID NO 19419.
XX
KW Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW tissue growth factor; immunomodulatory; cancer; leukaemia;
KW nervous system disorders; arthritis; inflammation.
XX
OS Homo sapiens.
XX
PN WO200164835-A2.
XX
PD 07-SEP-2001.
XX
PF 26-FEB-2001; 2001WO-US04927.
XX
PR 28-FEB-2000; 2000US-0515126.
PR 18-MAY-2000; 2000US-0577409.
XX
PA (HYSE-) HYSEQ INC.

```
XX
PI   Tang YT,  Liu C,  Drmanac RT;
XX
DR   WPI; 2001-514838/56.
DR   N-PSDB; AAI85458.
XX
PT   Isolated nucleic acids and polypeptides, useful for preventing
PT   diagnosing and treating e.g. leukaemia, inflammation and immune
PT   disorders -
XX
PS   Claim 20; SEQ ID NO 19419; 1399pp + Sequence Listing; English.
XX
CC   The invention relates to human polynucleotides (AAI79941-AAI93841) and
CC   the encoded proteins (AAO00010-AAO13910) that exhibit activity elating to
CC   cytokine, cell proliferation or cell differentiation or which may induce
CC   production of other cytokines in other cell populations. The
CC   polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC   peptide therapy. The polypeptides have various cytokine-like activities,
CC   e.g. stem cell growth factor activity, haematopoiesis regulating
CC   activity, tissue growth factor activity, immunomodulatory activity and
CC   activin/inhibin activity and may be useful in the diagnosis and/or
CC   treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC   inflammation.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence   138 AA;

  Query Match             74.4%;  Score 218;  DB 22;  Length 138;
  Best Local Similarity   78.0%;  Pred. No. 2.5e-24;
  Matches   39;  Conservative    6;  Mismatches    5;  Indels    0;  Gaps    0;

Qy       5 KAGNILLLEKIEHDDICNKTLKITDFGLAREWHRTTKMSTAGTYAWMAPE 54
           |: |||:|:|:|: |: || ||||||||||||||||||| ||||||||||
Db       1 KSSNILILQKVENGDLSNKILKITDFGLAREWHRTTKMSAAGTYAWMAPE 50


RESULT 9
ABB58999
ID   ABB58999 standard; Protein; 1020 AA.
XX
AC   ABB58999;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Drosophila melanogaster polypeptide SEQ ID NO 3789.
XX
KW   Drosophila; developmental biology; cell signalling; insecticide;
KW   pharmaceutical.
XX
OS   Drosophila melanogaster.
XX
PN   WO200171042-A2.
XX
PD   27-SEP-2001.
XX
PF   23-MAR-2001; 2001WO-US09231.
XX
PR   23-MAR-2000; 2000US-191637P.
PR   11-JUL-2000; 2000US-0614150.
XX
PA   (PEKE ) PE CORP NY.
XX
PI   Venter JC,  Adams M,  Li PWD,  Myers EW;
XX
DR   WPI; 2001-656860/75.
DR   N-PSDB; ABL03102.
XX
PT   New isolated nucleic acid detection reagent for detecting 1000 or more
PT   genes from Drosophila and for elucidating cell signalling and cell-cell
PT   interactions -
XX
PS   Disclosure; SEQ ID NO 3789; 21pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated nucleic acid detection reagent
CC   capable of detecting 1000 or more genes from Drosophila. The invention is
CC   useful in developmental biology and in elucidating cell signalling and
CC   cell-cell interactions in higher eukaryotes for the development of
CC   insecticides, therapeutics and pharmaceutical drugs. The invention
CC   discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA
CC   sequences (ABL01840-ABL16175) and the encoded proteins
CC   (ABB57737-ABB72072).
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence   1020 AA;

  Query Match             62.8%;  Score 184;  DB 22;  Length 1020;
  Best Local Similarity   63.0%;  Pred. No. 4e-18;
  Matches   34;  Conservative    8;  Mismatches   12;  Indels    0;  Gaps    0;

Qy       1 HRDIKAGNILLLEKIEHDDICNKTLKITDFGLAREWHRTTKMSTAGTYAWMAPE 54
           |||:|: |:|: | || : :  |||||||||||||| : | :|| ||||||| ||
Db     249 HRDLKSSNVLIYEAIEGNHLQQKTLKITDFGLAREMYNTQRMSAAGTYAWMPPE 302


RESULT 10
AAR85933
ID   AAR85933 standard; Peptide; 45 AA.
XX
AC   AAR85933;
XX
DT   14-FEB-1996  (first entry)
XX
DE   Protein tyrosine-kinase LpTK4 fragment.
XX
KW   Protein tyrosine-kinase; pTK; LpTK4; agonist; cell growth;
KW   differentiation.
XX
OS   Homo sapiens.
XX
PN   WO9527061-A1.
XX
PD   12-OCT-1995.
XX
PF   04-APR-1995;   95WO-US04228.
XX
PR   04-APR-1994;   94US-0222616.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Bennett BD,  Goeddel D,  Lee JM,  Matthews W,  Tsai SP;
PI   Wood WI;
XX
DR   WPI; 1995-366160/47.
DR   N-PSDB; AAT03094.
XX
PT   Agonist antibodies which activate specific protein tyrosine
PT   kinase(s)  - also activate chimeric proteins of kinase extracellular
PT   domain and Ig constant domain, useful for studying, and therapeutic
PT   modulation of, cell growth and differentiation
XX
PS   Disclosure; Page 38; 125pp; English.
XX
CC   DNA probes based on protein tyrosine-kinase (pTK) sequences were used
CC   to screen cDNA libraries to identify novel pTK genes.  A LpTK4 gene
CC   fragment (AAT03094) was isolated from lymphocytic and megakaryocytic
CC   cell line libraries and encoded a peptide (AAR85933) showing homology
CC   to known pTKs.  The LpTK4 peptide can be used in the design of
CC   drugs that modulate pTK activity.
XX
SQ   Sequence   45 AA;

  Query Match             59.0%;  Score 173;  DB 16;  Length 45;
```

```
  Best Local Similarity   74.4%;  Pred. No. 3e-18;
  Matches   32;  Conservative    7;  Mismatches    4;  Indels    0;  Gaps    0;

Qy       1 HRDIKAGNILLLEKIEHDDICNKTLKITDFGLAREWHRTTKMS 43
           |||:|: ||||| || ||: :|||||||||||||:||:||
Db       2 HRDLKSNNILLLQPIESDDMEHKTLKITDFGLAREWHKTTQMS 44


RESULT 11
ABB71694
ID   ABB71694 standard; Protein; 977 AA.
XX
AC   ABB71694;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Drosophila melanogaster polypeptide SEQ ID NO 41874.
XX
KW   Drosophila; developmental biology; cell signalling; insecticide;
KW   pharmaceutical.
XX
OS   Drosophila melanogaster.
XX
PN   WO200171042-A2.
XX
PD   27-SEP-2001.
XX
PF   23-MAR-2001; 2001WO-US09231.
XX
PR   23-MAR-2000; 2000US-191637P.
PR   11-JUL-2000; 2000US-0614150.
XX
PA   (PEKE ) PE CORP NY.
XX
PI   Venter JC,  Adams M,  Li PWD,  Myers EW;
XX
DR   WPI; 2001-656860/75.
DR   N-PSDB; ABL15797.
XX
PT   New isolated nucleic acid detection reagent for detecting 1000 or more
PT   genes from Drosophila and for elucidating cell signalling and cell-cell
PT   interactions -
XX
PS   Disclosure; SEQ ID NO 41874; 21pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated nucleic acid detection reagent
CC   capable of detecting 1000 or more genes from Drosophila. The invention is
CC   useful in developmental biology and in elucidating cell signalling and
CC   cell-cell interactions in higher eukaryotes for the development of
CC   insecticides, therapeutics and pharmaceutical drugs. The invention
CC   discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA
CC   sequences (ABL01840-ABL16175) and the encoded proteins
CC   (ABB57737-ABB72072).
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence   977 AA;

  Query Match             47.6%;  Score 139.5;  DB 22;  Length 977;
  Best Local Similarity   52.7%;  Pred. No. 1.6e-11;
  Matches   29;  Conservative    9;  Mismatches    8;  Indels    9;  Gaps    2;

Qy       1 HRDIKAGNILLLEKIEHDDICNKTLKITDFGLAREWHR-TTKMSTAGTYAWMAPE 54
           |||:|: |||:          |: :||:||| :|||:  :|||| ||| ||||||
Db     270 HRDLKSPNILI--------STNEVVKISDFGTSREWNEISTKMSFAGTVAWMAPE 316


RESULT 12
AAR82886
ID   AAR82886 standard; Protein; 859 AA.
XX
AC   AAR82886;
XX
DT   10-FEB-1996  (first entry)
XX
DE   Human leucine zipper protein-kinase.
XX
KW   Leucine zipper protein-kinase; enzyme; zpk; CNS; diagnosis;
KW   central nervous system.
XX
OS   Homo sapiens.
XX
PN   WO9523849-A1.
XX
PD   08-SEP-1995.
XX
PF   28-FEB-1995;   95WO-US02792.
XX
PR   01-MAR-1994;   94US-0205018.
XX
PA   (CHIL-) CHILDRENS HOSPITAL PHILADELPHIA.
XX
PI   Pleasure DE,  Reddy U;
XX
DR   WPI; 1995-320565/41.
DR   N-PSDB; AAT01031.
XX
PT   DNA encoding novel leucine zipper protein kinase - also probe(s) and
PT   polypeptide(s) prepared using the DNA, useful for inhibiting
PT   hyper-proliferation of CNS cells
XX
PS   Claim 4; Page 23-27; 40pp; English.
XX
CC   This novel protein may be used to treat tumors of the CNS in a
CC   mammal by inhibiting the overexpression of the leucine zipper
CC   protein-kinase in vivo, or by interfering with a vital signal
CC   in a chain of signals leading to tumorigenicity.
XX
SQ   Sequence   859 AA;

  Query Match             42.5%;  Score 124.5;  DB 16;  Length 859;
  Best Local Similarity   50.9%;  Pred. No. 2.4e-09;
  Matches   28;  Conservative   11;  Mismatches    7;  Indels    9;  Gaps    3;

Qy       1 HRDIKAGNILLLEKIEHDDICNKTLKITDFGLAREW-HRTTKMSTAGTYAWMAPE 54
           |||:|: |:|    | :||:    :||:||| ::|   ::|||| ||| ||||||
Db     234 HRDLKSPNML----ITYDDV----VKISDFGTSKELSDKSTKMSFAGTVAWMAPE 280


RESULT 13
AAW31227
ID   AAW31227 standard; Protein; 859 AA.
XX
AC   AAW31227;
XX
DT   17-FEB-1998  (first entry)
XX
DE   Human leucine-zipper protein kinase.
XX
KW   Leucine zipper protein kinase; zpk; human; metastasis; tumour;
KW   serine/threonine protein kinase; non-receptor type kinase;
KW   cell hyperproliferation.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Protein         1..859
FT                   /label= zpk
FT                   /note= "leucine zipper protein kinase"
FT   Domain          231..243
FT                   /label= protein_kinase_domain
FT                   /note= "As stated in specification"
FT   Misc-difference 234..235
FT                   /note= "Mentioned in specification"
FT   Misc-difference 236..237
```

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FT                   /note= "Mentioned in specification"
FT   Misc-difference 240
FT                   /note= "Mentioned in specification"
FT   Misc-difference 251
FT                   /note= "Mentioned in specification"
FT   Misc-difference 254..256
FT                   /note= "Mentioned in specification"
FT   Misc-difference 278..280
FT                   /note= "Mentioned in specification"
FT   Misc-difference 292
FT                   /note= "Mentioned in specification"
FT   Misc-difference 294..295
FT                   /note= "Mentioned in specification"
FT   Misc-difference 297
FT                   /note= "Mentioned in specification"
FT   Region          415..418
FT                   /note= "Putative endoplasmic reticulum targeting
FT                          sequence as given in the specification"
FT   Region          442..468
FT                   /label= Leucine_zipper_motif
FT                   /note= "As stated in specification"
FT   Misc-difference 443
FT                   /note= "Mentioned in specification"
FT   Misc-difference 450
FT                   /note= "Mentioned in specification"
FT   Misc-difference 457
FT                   /note= "Mentioned in specification"
FT   Misc-difference 464
FT                   /note= "Mentioned in specification"
FT   Region          537..544
FT                   /label= ATP_binding_site
FT                   /note= "As stated in specification"
XX
PN   US5676945-A.
XX
PD   14-OCT-1997.
XX
PF   01-MAR-1994;   94US-0205018.
XX
PR   28-FEB-1995;   95US-0395580.
PR   01-MAR-1994;   94US-0205018.
XX
PA   (CHIL-) CHILDRENS HOSPITAL PHILADELPHIA.
XX
PI   Pleasure D,  Reddy U;
XX
DR   WPI; 1997-511822/47.
DR   N-PSDB; AAT89349.
XX
PT   Human leucine-zipper protein kinase - useful for treating tumours of
PT   the central nervous system
XX
PS   Claim 3; Fig 1; 19pp; English.
XX
CC   This sequence represents a novel human leucine-zipper protein kinase
CC   isolated from brain tissue. The specification states that the
CC   protein contains an ATP-binding site at position 537-544 (consensus
CC   sequence Gly-Xaa-Gly-Xaa-Xaa-Gly), a protein kinase domain at position
CC   231-243 and a putative endoplasmic reticulum (ER) targeting sequence at
CC   position 413-418 (consensus sequence REEL). This protein is most similar
CC   to members of serine/threonine protein kinases and is believed to be a
CC   "non-receptor type kinase" based on its lack of a transmembrane domain.
CC   Probes to this protein could be used for diagnostic or research purposes
CC   to detect or quantitate the expression of leucine-zipper protein kinase.
CC   Overexpression of leucine zipper protein kinase can result in
CC   hyperproliferation of cells and metastasis. The application of exogenous
CC   leucine-zipper protein kinase may interfere with specific protein-protein
CC   or protein-nucleic acid interactions involved in hyperproliferation. This
CC   may be used to treat animals suffering from tumours of the central
CC   nervous system by inhibiting the overexpression of leucine-zipper protein
CC   kinase in vivo or by interfering with a vital signal in the chain of
CC   signals leading to tumourigenicity.
XX
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SQ   Sequence   859 AA;

  Query Match             42.5%;  Score 124.5;  DB 18;  Length 859;
  Best Local Similarity   50.9%;  Pred. No. 2.4e-09;
  Matches   28;  Conservative   11;  Mismatches    7;  Indels    9;  Gaps    3;

Qy       1 HRDIKAGNILLLEKIEHDDICNKTLKITDFGLAREW-HRTTKMSTAGTYAWMAPE 54
           |||:|: |:|    | :||:    :||:||| ::|   ::|||| ||| ||||||
Db     234 HRDLKSPNML----ITYDDV----VKISDFGTSKELSDKSTKMSFAGTVAWMAPE 280


RESULT 14
ABB57049
ID   ABB57049 standard; Protein; 888 AA.
XX
AC   ABB57049;
XX
DT   07-MAR-2002  (first entry)
XX
DE   Mouse ischaemic condition related protein sequence SEQ ID NO:79.
XX
KW   Mouse; ischaemia; compressive ischaemia; occlusive ischaemia;
KW   vasospastic ischaemia; ischaemic condition; ischaemic disease.
XX
OS   Mus musculus.
XX
PN   WO200188188-A2.
XX
PD   22-NOV-2001.
XX
PF   18-MAY-2001; 2001WO-JP04192.
XX
PR   18-MAY-2000; 2000JP-0145977.
XX
PA   (UYNI-) UNIV NIHON SCHOOL JURIDICAL PERSON.
XX
PI   Ishikawa K,  Asai S,  Takahashi Y,  Nagata T,  Ishii Y;
XX
DR   WPI; 2002-034733/04.
DR   N-PSDB; ABI99250.
XX
PT   Examining the ischemic condition (e.g. occlusive ischemia) by measuring
PT   expression levels of particular genes defined in the specification or
PT   by determining the expression profile of a gene group comprising these
PT   genes -
XX
PS   Claim 2; Page 244-248; 2690pp; English.
XX
CC   The present invention describes a method for examining ischaemic
CC   conditions, comprising measuring the expression levels of particular
CC   genes (I) in a test sample or determining the expression profile of a
CC   gene group in the sample comprising genes selected from (I). The method
CC   is useful for examining the ischaemic condition (e.g. compressive
CC   ischaemia, occlusive ischaemia or vasospastic ischaemia) by measuring
CC   expression levels of particular genes (ABI99202 to ABI99912, encoding
CC   the protein sequences in ABB57020 to ABB57374) or by determining the
CC   expression profile of a gene group comprising these genes. The
CC   expression levels or expression profiles produced by these genes are
CC   used as an indicator when screening for ischaemic condition-improving
CC   drugs or therapeutics for ischaemic diseases. ABI99913 and ABI99914
CC   represent PCR primers for a mouse ischaemic condition related sequence,
CC   which are used in the exemplification of the present invention.
XX
SQ   Sequence   888 AA;

  Query Match             42.5%;  Score 124.5;  DB 23;  Length 888;
  Best Local Similarity   50.9%;  Pred. No. 2.5e-09;
  Matches   28;  Conservative   11;  Mismatches    7;  Indels    9;  Gaps    3;

Qy       1 HRDIKAGNILLLEKIEHDDICNKTLKITDFGLAREW-HRTTKMSTAGTYAWMAPE 54
           |||:|: |:|    | :||:    :||:||| ::|   ::|||| ||| ||||||
Db     267 HRDLKSPNML----ITYDDV----VKISDFGTSKELSDKSTKMSFAGTVAWMAPE 313
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RESULT 15
AAG28423
ID   AAG28423 standard; Protein; 276 AA.
XX
AC   AAG28423;
XX
DT   17-OCT-2000  (first entry)
XX
DE   Arabidopsis thaliana protein fragment SEQ ID NO: 33634.
XX
KW   Protein identification; signal transduction pathway; metabolic pathway;
KW   hybridisation assay; genetic mapping; gene expression control; promoter;
KW   termination sequence.
XX
OS   Arabidopsis thaliana.
XX
PN   EP1033405-A2.
XX
PD   06-SEP-2000.
XX
PF   25-FEB-2000; 2000EP-0301439.
XX
PR   25-FEB-1999;   99US-0121825.
PR   05-MAR-1999;   99US-0123180.
PR   09-MAR-1999;   99US-0123548.
PR   23-MAR-1999;   99US-0125788.
PR   25-MAR-1999;   99US-0126264.
PR   29-MAR-1999;   99US-0126785.
PR   01-APR-1999;   99US-0127462.
PR   06-APR-1999;   99US-0128234.
PR   08-APR-1999;   99US-0128714.
PR   16-APR-1999;   99US-0129845.
PR   19-APR-1999;   99US-0130077.
PR   21-APR-1999;   99US-0130449.
PR   23-APR-1999;   99US-0130510.
PR   23-APR-1999;   99US-0130891.
PR   28-APR-1999;   99US-0131449.
PR   30-APR-1999;   99US-0132048.
PR   30-APR-1999;   99US-0132407.
PR   04-MAY-1999;   99US-0132484.
PR   05-MAY-1999;   99US-0132485.
PR   06-MAY-1999;   99US-0132486.
PR   06-MAY-1999;   99US-0132487.
PR   07-MAY-1999;   99US-0132863.
PR   11-MAY-1999;   99US-0134256.
PR   14-MAY-1999;   99US-0134218.
PR   14-MAY-1999;   99US-0134219.
PR   14-MAY-1999;   99US-0134221.
PR   14-MAY-1999;   99US-0134370.
PR   18-MAY-1999;   99US-0134768.
PR   19-MAY-1999;   99US-0134941.
PR   20-MAY-1999;   99US-0135124.
PR   21-MAY-1999;   99US-0135353.
PR   24-MAY-1999;   99US-0135629.
PR   25-MAY-1999;   99US-0136021.
PR   27-MAY-1999;   99US-0136392.
PR   28-MAY-1999;   99US-0136782.
PR   01-JUN-1999;   99US-0137222.
PR   03-JUN-1999;   99US-0137528.
PR   04-JUN-1999;   99US-0137502.
PR   07-JUN-1999;   99US-0137724.
PR   08-JUN-1999;   99US-0138094.
PR   10-JUN-1999;   99US-0138540.
PR   10-JUN-1999;   99US-0138847.
PR   14-JUN-1999;   99US-0139119.
PR   16-JUN-1999;   99US-0139452.
PR   16-JUN-1999;   99US-0139453.
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